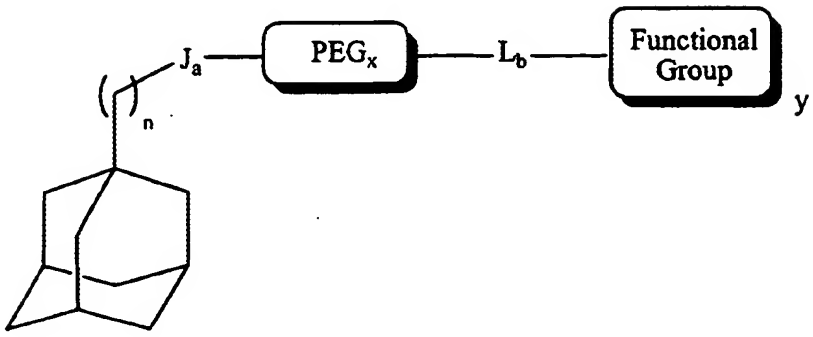
## IN THE CLAIMS

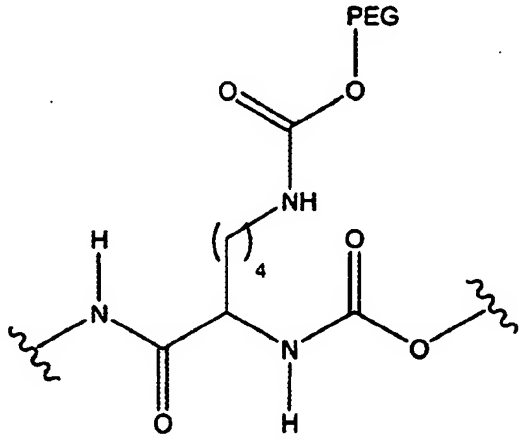
1. (Withdrawn) An adamantane derivative of the formula:




wherein

J is –NH–, –C(=O)NH–$(CH_2)_d$–, –NH–C(=O)–$(CH_2)_d$–, –$CH_2SS$–,

–C(=O)O–$(CH_2)_e$–O–P(=O)(O–$(CH_2)_e$–Ad)O–,




a peptide or polypeptide residue, or –NH(C=O)–CH($R^1$)–NH–(C=O)–CH($R^1$)–NH–;

Ad is adamantyl;

$R^1$ is –$(CH_2)_a$–$CO_2H$, an ester or salt thereof; or

–$(CH_2)_a$–$CONH_2$;

PEG is –$O(CH_2CH_2O)_z$–, where z varies from 2 to 500;

L is H, –$NH_2$, –NH–(C=O)–$(CH_2)_c$.–(C=O)—$CH_2$, –$S(=O)_2$–HC=$CH_2$–, –SS–, –C(=O)O– or a carbohydrate residue;

a is 0 or 1;

b is 0 or 1;

d ranges from 0 to 6;
e ranges from 1 to 6;
y is 0 or 1; and
x is 0 or 1.

2. (Withdrawn) A composition comprising a particulate composite of a polymer and a therapeutic agent and an inclusion complex of said polymer and a complexing agent having a functional group.

3. (Withdrawn) A composition of claim 2, wherein said polymer has host functionality and said complexing agent has guest functionality.

4. (Withdrawn) A composition of claim 2, wherein said polymer has guest functionality and said complexing agent has host functionality.

5. (Withdrawn) A composition of claim 2, wherein said polymer has host and guest functionality and comprising a mixture of complexing agents having guest and host functionality.

6. (Withdrawn - currently amended) A composition of claim 3, 4, or 5 wherein said host functionality is selected from the group of cyclodextrin, a ~~carcerond~~ carcerand, a ~~cavitanal~~ cavitand, a crown ether, a cryptand, a cucurbituril, a ~~calixerane~~ calixerene, a spherand or a mixture thereof.

7. (Withdrawn) A composition of claim 3, 4, or 5 wherein said complexing agent further comprises a spacer group.

8. (Withdrawn) A composition of claim 3, 4, or 5, wherein said inclusion guest is selected from the group consisting of adamantane, diadamantane, naphthalene, and cholesterol.

9. (Withdrawn) A composition of claim 8, wherein said host functionality is a cyclodextrin and said inclusion guest is adamantane or diadamantane.

10. (Withdrawn - currently amended) A composition of claim 2, 3, 4, or 5 wherein said functional group of said functional group is a ligand, nuclear localization signal, endosomal release peptide, endosomal release polymer, a second therapeutic agent, a stabilizing polymer/hydrophilic polymer for stabilization or a mixture thereof; and said spacer group is selected from the group consisting of: a direct link, a ~~phophate~~ phosphate group, and polyethylene glycol and a short anionic peptide sequence.

11. (Withdrawn - currently amended) A composition of claim 2, 3, 4, or 5 wherein said therapeutic agent is selected from the group consisting of an antibiotic, a steroid, a polynucleotide, small molecule pharmaceutical, a ~~viruse~~ virus, a plasmid, a peptide, a peptide fragment, a chelating agent, a biologically active macromolecule, and mixtures thereof.

12. (cancelled)

13. (Withdrawn) A method of delivering a therapeutic comprising the step of administering to a person in recognized need of the therapeutic agent a therapeutically effective amount of a composition of claim 2, 3, or 5.

14. (currently amended) A method of preparing a composition, comprising combining a therapeutic agent, a cyclodextrin-containing polymer having host and/or guest functionality, and a complexing agent comprising at least one functional group and at least one host/guest moiety that forms an inclusion complex with a host/guest moiety of said cyclodextrin-containing polymer to form the composition, wherein ~~said cyclodextrin-containing polymer and said complexing agent form an inclusion complex, and~~ said therapeutic agent, cyclodextrin-containing polymer, and complexing agent are separate molecules.

15. (currently amended) A method of claim 14, wherein said therapeutic agent is first combined with said cyclodextrin-containing polymer and the resulting mixture is then combined with said complexing agent such that said cyclodextrin-containing polymer and said complexing agent form an inclusion complex.

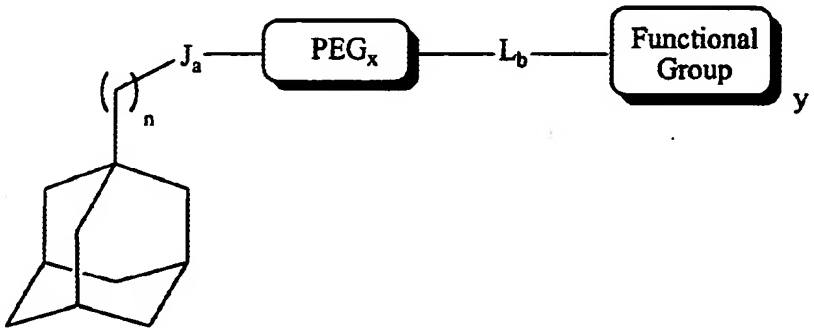
16. (currently amended) A method of claim 14, wherein said cyclodextrin-containing polymer is first combined with said complexing agent to form an inclusion complex and said inclusion complex is combined with said therapeutic agent.

17. (cancelled)

18. (Previously presented) A method of claim 14, wherein said therapeutic agent is selected from an antibiotic, a steroid, a polynucleotide, small molecule pharmaceutical, a virus, a plasmid, a peptide, a peptide fragment, a chelating agent, a biologically active macromolecule, and mixtures thereof.

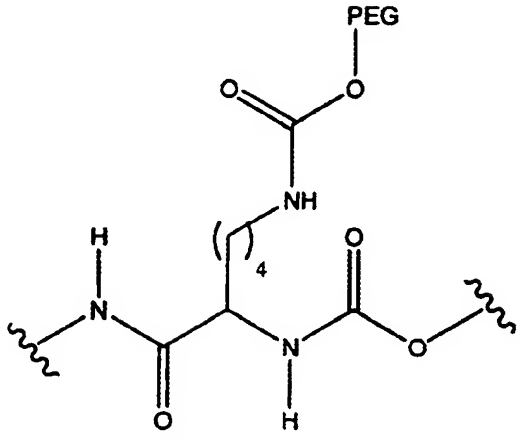
19. (Previously presented) A method of claim 18, wherein said therapeutic agent is a polynucleotide.

20. (Previously presented) A method of claim 14, wherein the complexing agent is an adamantane derivative of the formula:




wherein

J is –NH-, -C(=O)NH-$CH_2)_d$-, -NH-C(=O)-$(CH_2)_d$-, -$CH_2$SS-, -C(=O)O-$(CH_2)_e$-O-P(=O)(O-




$(CH_2)_e$-Ad)O-, , or

-NH-(C=O)-CH($R^1$)-NH-(C=O)-CH($R^1$)-NH-;

Ad is adamantyl;

$R^1$ is –$(CH_2)$-$CO_2H$, an ester or salt thereof; or –$(CH_2)_a$-$CONH_2$;

PEG is –$O(CH_2CH_2O)_z$-, where z varies from 2 to 300;

L is H, -NH, -NH-(C=O)-$(CH_2)_e$-(C=O)-$CH_2$-, -$S(=O)_2$-HC=CH-, -SS-, -C(=O)O-, or a carbohydrate residue;

a is 0 or 1;

b is 0 or 1;

d ranges from 0 to 6;

e ranges from 1 to 6;

n ranges from 0 to 6;

y is 1; and

x is 0 or 1.

21. (cancelled)

22. (cancelled)

23. (currently amended) A method of claim 14, wherein ~~the~~ at least one functional group includes a group selected from a ligand, a nuclear localization signal, an endosomal release peptide, an endosomal release polymer, or a membrane permeabilization agent.

24. (currently amended) Á method of claim 14, wherein ~~the~~ at least one functional group includes a moiety that increases the solubility of the composition under biological conditions relative to a composition of the cyclodextrin-containing polymer and therapeutic agent alone.

25. (currently amended) A method of claim 14, wherein ~~the~~ at least one functional group includes a moiety that stabilizes the composition under biological conditions relative to a composition of the cyclodextrin-containing polymer and therapeutic agent alone.

26. (currently amended) A method of claim 14, wherein ~~the~~ at least one functional group includes a therapeutic agent reversibly bound to the complexing agent.

27. (currently amended) A method of claim 14, wherein the cyclodextrin-containing polymer comprises [[a]] at least one host moiety that forms an inclusion complex with [[a]] at least one guest moiety of the complexing agent.

28. (currently amended) A method of claim 14, wherein the cyclodextrin-containing polymer comprises [[a]] at least one guest moiety that forms an inclusion complex with [[a]] at least one host moiety of the complexing agent.

29. (currently amended) A method of claim 14, wherein the complexing agent further comprises a spacer group positioned between ~~the~~ at least one functional group and ~~the~~ at least one host/guest moiety of the complexing agent.

30. (currently amended) A method of claim 14, wherein ~~the~~ at least one guest moiety is an adamantyl group and ~~the~~ at least one host moiety is a cyclodextrin moiety.

31. (currently amended) A method of claim 14, wherein ~~the~~ at least one host/guest moiety of the complexing agent is selected from adamantyl, diadamantyl, naphthyl, cholesterol, cyclodextrin, and mixtures thereof.

32. (new) A method of claim 14, wherein the cyclodextrin-containing polymer comprises a linear cyclodextrin-containing polymer wherein cyclodextrin moieties are present in the backbone of the polymer.

33. (new) A method of claim 14, wherein the cyclodextrin-containing polymer contains at least one cyclodextrin moiety in a pendant or branched chain of the cyclodextrin-containing polymer.

34. (new) A method of claim 14, wherein the complexing agent comprises at least one polymer portion.

35. (new) A method of claim 34, wherein at least one polymer portion of the complexing agent comprises PEG or derivatives thereof.

36. (new) A method of claim 14, wherein at least one functional group comprises at least one polymer portion.

37. (new) A method of claim 29, wherein the spacer group comprises at least one polymer portion.